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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,395	03/19/2001	Junji Momoda	SPO-591	2375

7590 09/15/2004

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EXAMINER

SELLERS, ROBERT E

ART UNIT PAPER NUMBER

1712

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/787,395

Applicant(s)

MOMODA ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-31 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-15 and 19-27, drawn to an uncured composition comprising A) a monomer whose homopolymer has a L-scale Rockwell hardness of not greater than 40, B) a monomer whose homopolymer has a L-scale Rockwell hardness of not less than 60, C) a bifunctional monomer with a L-scale Rockwell hardness of not less than 60, and D) a photochromic compound.

Group II, claims 16, 17 and 28-31, drawn to a cured product obtained by curing the composition of Group I.

Group III, claim 18, drawn to a photochromic cured product obtained by curing the composition of Group I coated on a lens.

2. The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons. The special technical feature is the uncured composition comprising **A) a monomer** whose homopolymer has a L-scale Rockwell **hardness of not greater than 40**, **B) a monomer** whose homopolymer has a L-scale Rockwell **hardness of not less than 60**, **C) a bifunctional monomer** with a L-scale Rockwell **hardness of not less than 60**, and **D) a photochromic compound**.

3. Momoda et al. Patent No. 6,194,511 (col. 3, lines 31-64) discloses an uncured composition containing a **sulfur-containing (meth)acrylate** of general formula (1) (col. 3, lines 4-16, conforming to claimed bifunctional monomer C) according to page 22, line 27 to page 23, line 3 of the specification), an epoxy-containing (meth)acrylate such as **glycidyl acrylate** (col. 8, line 29, within the ambit of claimed low hardness monomer A) as described on page 14, line 25), a (meth)acrylate monomer such as **trimethylolpropane trimethacrylate** (col. 7, line 35, embraced by claimed high hardness monomer B) as set forth on page 18, line 7 and shown in Table 1 on page 51, TMPT, page 44, lines 24-26), and a **chromene** photchromic compound possessing the general formula of claim 3 (col. 12, lines 10-35).
4. Japanese Patent No. 10-338869 espouses an uncured formulation prepared from **trimethylolpropane trimethacrylate** (translation, page 5, paragraph 24, line 2 and page 15, paragraph 94, line 2, "TMPT"), **glycidyl, ethyl or butyl acrylate** (page 6, paragraph 31, lines 5 and 10, encompassed by low hardness monomer A) as disclosed on page 14, lines 23-25), **divinylbenzene** (page 7, paragraph 32, line 5, a species of bifunctional monomer C) as acknowledged on page 19, line 15), and a **chromene** photochromic compound having the general formula of claim 3 (page 8, paragraphs 35 and 36).
5. The claimed composition does not make a contribution over the prior art, thereby validating a holding of lack of unity.

6. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

A) The low hardness monomers wherein an election of a particular species is indicated such as the polyethylene glycol methacrylate (specification, page 43, lines 10-13, "MAPEG", exhibited in Table 1 on page 52).

B) The high hardness monomers wherein an election of a single species is required such as the trimethylolpropane trimethacrylate shown in Table 1).

C) The bifunctional monomers wherein an election of a certain species is identified such as the glycidyl methacrylate of claims 14 and 26.

D) The photochromic compounds wherein an election of a particular species is indicated such as one of Chromenes 1-8 on pages 45-48 and Table 1.

Applicant is required, in reply to this action, to elect a single species within each of items A), B), C) and D) to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141.

If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Claims 1-31 are generic.

7. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the reasons espoused with respect to the holding of lack of unity of invention explained in paragraph 2 hereinabove.

8. The reply to this requirement to be complete must include an election of the invention and species to be examined even though the requirement be traversed (37 CFR 1.143). Upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Japanese Patent No. 6-220247 is directed to a copolymer of a low T<sub>g</sub> monomer such as ethyl acrylate (translation, page 3, paragraph 11, line 3), a high T<sub>g</sub> monomer such as divinylbenzene (page 3, paragraph 10, line 3) and a photochromic compound.

10. Japanese Patent No. 5-34649 is drawn to a monomer mixture of trimethylolpropane trimethacrylate (translation, page 3, paragraph 13, line 11), a hydroxyalkyl (meth)acrylate, a divinylbenzene crosslinking monomer (page 4, line 2) and a photochromic compound.

11. The aforementioned Japanese patents as well as Japanese Patent No. 4-202309 have been cited in the International Search Report filed March 19, 2001 and is made of record in the attached Notice of References Cited, Form PTO-892.

(571) 272-1093 (Fax no. (703) 872-9306)  
Monday to Friday from 9:30 to 6:00 EST

Any administrative inquiries can be obtained by accessing the Patent Application Information Retrieval (PAIR) system. Published applications are available through either private or public PAIR. Unpublished applications are available via private PAIR only. Consult <http://pair-direct.uspto.gov> or contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



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